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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,605	11/12/2003	Leung Tsang	14053.42.0	5856
22859 7590 02/14/2007 INTELLECTUAL PROPERTY GROUP FREDRIKSON & BYRON, P.A. 200 SOUTH SIXTH STREET SUITE 4000 MINNEAPOLIS, MN 55402			EXAMINER MAI, TAN V	
			ART UNIT 2193	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/14/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/706,605	Applicant(s) TSANG ET AL.	
	Examiner Tan V. Mai	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2006.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 28-35 is/are pending in the application.
 4a) Of the above claim(s) 25-27 is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-24 and 28-35 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 6/4/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/6/04</u> . | 6) <input type="checkbox"/> Other: _____ |

1. Applicant's election with traverse of Group I, claims 1-24 and 28-35, in Paper dated 11/27/06 is acknowledged. The traversal is on the ground(s) that

“[a]pplicant respectfully traverses the restriction requirement and asks that all claims be examined as part of the prosecution of the present application. Applicant traverses the restriction/election requirement on the grounds that no serious burden on the Examiner exists. If the search and examination of an entire application can be made without serious burden, it must be examined on the merits even though it includes claims directed to distinct or independent inventions. M.P.E.P § 803. The subject matter of Groups I and II are believed to be sufficiently related that a thorough search for the subject matter of either group would encompass a search for the subject matter of both groups. To avoid duplicative examination by the Patent Office and unnecessary delay and expense to Applicant, Applicant respectfully requests examination on the merits of all the claims, not just those of the invention elected.

Furthermore, Applicant submits that if a determination of an allowable generic claim is issued, claims that are written in dependant form or otherwise include all the limitations of the allowed generic claim should be considered. M.P.E.P. § 809.02(c). Therefore, Applicant respectfully requests that the Examiner consider rejoining the claims of the non-elected group (e.g., Group II) upon a finding of allowability of a generic claim.

Finally, it is to be understood that the election in the present response is for the sole purpose of the Examiner's initial search and examination, and that upon allowance of a generic claim, all embodiments encompassed by that claim will then be examined. M.P.E.P. §809.02(c). Therefore, Applicant respectfully requests that the search be conducted to provide for the inclusion of all embodiments included in the generic claim and all claims dependent therefrom.”

(emphasis added). This is not found persuasive because:

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Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because subcombination is not essential to combination. The subcombination has separate utility such method for determining rank of a block. It is noted that Group I, claims 1-24 and 28-35, requires search in **class 708, subclass 446** and further requires search in data bases with the **search terms** such as: **solv\$3, equation, integral...**. In Group II, claims 25-27, requires search in **class 708, subclass 200+, class 340, subclass 146.2** and further requires search in data bases with the **search terms** such as: **rank\$3, sort\$3....**.

The requirement is still deemed proper and is therefore made FINAL.
made FINAL.

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-24 and 28-35 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims recite a method / apparatus / record carrier product for performing a mathematical function. It is noted that apparatus claim does NOT detail the physical

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structures. Also, it is noted that the term "carrier" in preamble of claim 29 is considered as "wave carrier".

"[t]o satisfy section 101 requirements, the claim must be for a practical application of the Sec. 101 judicial exception, which can be identified in various ways:

- . The claimed invention "transforms" an article or physical object to a different state or thing.
- . The claimed invention otherwise produces a useful, concrete and tangible result,..."

See "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" OG Date: 22 November 2005.

Since there is no physical transform to establish a practical application, a useful, concrete and tangible result appears to be lacking. Therefore, claims 1-24 and 28-35 are directed to a non-statutory process.

3. Claims 1-24 and 28-35 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 101 set forth in this Office action.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cited references are art of interest.

5. The following is an examiner's statement of reasons for allowance: the recorded references do NOT teach or suggest the novel step (ii)-step (iv) as recited in independent claim 1. Similar language is used in independent claims 28-29.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan V. Mai whose telephone number is (571) 272-3726. The examiner can normally be reached on Mon-Wed and Fri. from 9:30am to 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An, can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is:

Official (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.



Tan V. Mai
Primary Examiner